



NORLITE, LLC

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July 11, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report
Kiln 1: 06/19/13 – 07/11/13
Kiln 2: 06/19/13 – 07/11/13

Dear Sir/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 06/19/13 thru 07/11/13. The attached document explains each of the "malfunctions" for Kilns One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. The stack gas cutoffs were primarily associated with access water from increased Mist Pad rinse water flow rates. Operations had identified that the Mist Pad was becoming coated with soda ash solids so to help prevent plugging of the Mist pad, additional rinse water was applied. The additional rinse water helped keep the Mist pad from become plugged with soda ash solids but also contributed to water droplets hitting the stack gas probe and causing false readings. Both kilns have undergone kiln maintenance to help address the soda ash build up in June and July. The maintenance which was conducted should help resolve the soda ash build up issue.

To help resolve stack gas span cutoffs in general, Norlite has been working with the Department to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and RATA tested to obtain additional information to be used in future calculations. Norlite is working to have the unit in Kiln 1 completely certified and approved for operation by Mid-August of 2013. Before the unit can be certified and officially used at the kiln, Norlite and the Department must first decide what moisture constant will be used in the flow rate calculation. Norlite will be presenting information to the Department the week of July 15th to start this discussion. After final approval is given for the unit on Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion which will hopefully see the unit in certified operation by October 2013.



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Norlite has been working with the Department to improve LGF delivery and handling at the kilns to address these types of cutoffs. The Department has conditionally approved Norlite's plan to remove the minimum LLGF Line Pressure requirement, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The Department has requested a six month study be conducted without a minimum LLGF Line Pressure requirement. The study has been underway since May 01, 2103 and will be completed on October 31, 2013. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. Norlite will have a pump in place sooner but no later than December of 2013. Norlite will submit a final report to the Department in December 2013 detailing the findings from the study without a minimum LLGF Line Pressure. Norlite is hopeful to have final approval from the Department early 2014 for the positive displacement pump which is installed and for the final removal of the LLGF Line Pressure requirement.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe



NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
06/19/13 - 07/11/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/25/2013	12:26:01	6/25/2013	12:31:39	0:05:38	119	Malfunction	Baghouse Dust Was Found in the pH Sample Loop Which Caused the pH To Read High	Scrubber pH	Span	The Kiln Was Shutdown On 6/26/13 For Baghouse Maintenance
6/25/2013	18:58:26	6/25/2013	18:58:53	0:00:27	120	Malfunction	Baghouse Dust Was Found in the pH Sample Loop Which Caused the pH To Read High	Scrubber pH	Span	The Kiln Was Shutdown On 6/26/13 For Baghouse Maintenance
6/25/2013	23:55:16	6/25/2013	23:55:38	0:00:22	121	Malfunction	Baghouse Dust Was Found in the pH Sample Loop Which Caused the pH To Read High	Scrubber pH	Span	The Kiln Was Shutdown On 6/26/13 For Baghouse Maintenance
6/26/2013	1:45:25	6/26/2013	1:45:46	0:00:21	122	Malfunction	Baghouse Dust Was Found in the pH Sample Loop Which Caused the pH To Read High	Scrubber pH	Span	The Kiln Was Shutdown On 6/26/13 For Baghouse Maintenance
6/29/2013	6:50:44	6/29/2013	7:19:13	0:28:29	123	Malfunction	The LGF Pump Stopped Which Caused An LGF Flow Surge	LGF Flow		The Pump Was Restarted and the Pump Pressure Adjusted to Ensure Operation
6/30/2013	22:34:41	6/30/2013	22:43:41	0:09:00	124	Malfunction	The End of the Burn Tank Was Reached Which Caused A Sudden LGF Flow Surge	LGF Flow		Switched Tanks and Adjusted Fuel Flow
7/3/2013	5:19:29	7/3/2013	5:20:02	0:00:33	125	Malfunction	A Nitrogen Leak Was Found at the Automated Valve Which Maintains Proper Rear Chamber Pressures. The Leak Was Causing the Valve to Respond Slowly Which Allowed the Rear Chamber Pressure to Reach the Upper Limit	Back Chamber Pressure, 1 Second Delay	Opl	The Nitrogen Leak Was Repaired and the Valve Tested to Ensure Proper Function and Response Time
7/4/2013	4:14:02	7/4/2013	4:22:18	0:08:16	126	Malfunction	The Shale Feed System Had Plugged Which Caused the Clinker Cooler to Have Little or No Clinker In It Which Caused the Cooler Fans to Have An Increased Effectiveness and Reduce the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Reestablished the Shale Feed and Reduced the Clinker Cooler Fans Until Clinker Was Present
7/8/2013	12:10:23	7/8/2013	12:11:14	0:00:51	127	Malfunction	The Mist Pad Rinse Water Flow Was Set Higher Than Normal Which Caused Water Droplets to Contact the Stack Gas Probe	Stack Gas Flow Rate	Span	The Rinse Water Flow Rate Was Reduced to Normal Operation
7/8/2013	13:07:06	7/8/2013	13:07:28	0:00:22	128	Malfunction	Water from the Mist Pad Was Still Contacting the Stack Gas Probe	Stack Gas Flow Rate	Span	The Rinse Water Was Turned Off to Allow Access Water to Leave the System
7/9/2013	2:21:07	7/9/2013	2:45:39	0:24:32	129	Malfunction	The Stack Gas Was Inspected By the I&E Department and Determined to be Coated With Soda Ash Solids	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Ensured Proper Operation
7/9/2013	21:45:28	7/9/2013	21:45:47	0:00:19	130	Malfunction	While Removing Aggregate Balls From the Clinker Cooler, the Hook Slipped And Allowed the Cooler Door to Slam Shut Which Changed the Differential Pressure Enough to Reach the Upper Limit	Front Kiln Pressure, 1 Second Delay	Opl	The Operator Removed all the Aggregate Balls and Closed the Cooler Doors
7/10/2013	12:39:28	7/10/2013	12:43:22	0:03:54	131	Malfunction	Kiln 2 Was Down for Maintenance Which Stressed the Kiln 1 Primary Air Fan and Caused it to Trip Out Which Caused A Loss of Rear Chamber Pressure	Back Chamber Pressure, HRA	Opl	I&E Reset the Breaker for the Primary Air Fan and Restarted the Fan



NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
06/19/13 - 07/11/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/24/2013	12:42:17	6/24/2013	12:43:12	0:00:55	83	Malfunction	The LGF Pump Started to Surge Which Caused Sudden Flow Rate Changes With the LGF, Triggering the Upper Instrument Setpoint For LGF Flow to be Reached	LGF Flow	Span	The LGF Pump Was Adjusted By Partially Closing a Valve On the Pump Itself to Maintain a Certain Pressure
6/27/2013	9:21:54	6/27/2013	9:26:40	0:04:46	84	Malfunction	The Mist Pad Rinse Water Had Been Increased to Help Rinse the Mist Pad of Soda Ash Solids Which Caused Water Droplets to Hit the Probe, Triggering Erroneous Readings	Stack Gas Flow Rate	Span	The Mist Pad Water Flow Was Reduced
6/30/2013	22:34:39	6/30/2013	22:35:13	0:00:34	85	Malfunction	The LGF Pump Started to Surge Which Caused Sudden Flow Rate Changes With the LGF, Triggering the Upper Instrument Setpoint For LGF Flow to be Reached	LGF Flow	Span	The LGF Pump Was Adjusted By Partially Closing a Valve On the Pump Itself to Maintain a Certain Pressure
6/30/2013	22:37:52	6/30/2013	22:42:48	0:04:56	86	Malfunction	The End of the Burn Tank Was Reached Which Caused an LGF Surge, Triggering the Instantaneous Upper Instrument Setpoint To Be Reached for LGF Flow Span	LGF Flow	Span	Switched Tanks and Adjusted Fuel Flow
7/2/2013	23:16:28	7/2/2013	23:16:50	0:00:22	87	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber Recirc. Rate Span	Scrubber Recirc. Rate	Span	Adjusted Scrubber Recirc. Rate and Inspected the Flow Meter for Proper Operation
7/4/2013	13:17:48	7/4/2013	13:20:24	0:02:36	88	Malfunction	After Rinsing the Mist Pad, Excess Water In the System Contacted the Probe and Caused False Readings	Stack Gas Flow Rate	Span	Reduced the ID Fan Speed to Help Stop Water Droplets From Hitting the Probe
7/4/2013	23:28:02	7/4/2013	23:28:38	0:00:36	89	Malfunction	After Rinsing the Mist Pad, Excess Water In the System Contacted the Probe and Caused False Readings	Stack Gas Flow Rate	Span	Reduced the ID Fan Speed to Help Stop Water Droplets From Hitting the Probe